

3/17/08

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PTO/SB/21 (09-04)

Approved for use through 07/31/2006. CMB 0651-0031
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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

(not including cited References)

Total Number of Pages in This Submission

7

Application Number

10/553,893

Filing Date

10/21/2005

First Named Inventor

Chistyakov

Art Unit

Not Yet Assigned 2821

Examiner Name

Not Yet Assigned PHILOGENE

Attorney Docket Number

ZON-005USN

ENCLOSURES (Check all that apply)

Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)

Reply to Missing Parts/
Incomplete ApplicationReply to Missing Parts
under 37 CFR 1.52 or 1.53

Drawing(s)



Licensing-related Papers



Petition

Petition to Convert to a
Provisional Application

Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) _____

Landscape Table on CD



Remarks



After Allowance Communication to TC

Appeal Communication to Board
of Appeals and InterferencesAppeal Communication to TC
(Appeal Notice, Brief, Reply Brief)

Proprietary Information



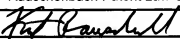
Status Letter

Other Enclosure(s) (please identify
below):PTO Form 1449 (4 pgs.); Copies of
References B1-B2 and C1-C14; and
Return Receipt Postcard.**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name

Rauschenbach Patent Law Group, LLC

Signature



Printed name

Kurt Rauschenbach

Date

January 13, 2006

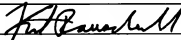
Reg. No.

40,137

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature



Typed or printed name

Kurt Rauschenbach

Date

January 13, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /H.P./

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Chistyakov
SERIAL NO.: 10/553,893 GROUP NO.: Not Yet Assigned
FILING DATE: October 21, 2005 EXAMINER: Not Yet Assigned
TITLE: High Density Plasma Source

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. BOX 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. §1.97, Applicants hereby make of record the references listed on the accompanying Form PTO-1449 for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of References B1-B2 and C1-C14 are enclosed.

REMARKS

In accordance with the provisions of 37 C.F.R. §1.97, this statement is being filed (CHECK ONE):

- ☒ (1) within three months of the Filing Date of a national application other than a continued prosecution application under § 1.53(d); or within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; or before the mailing of a first Office Action on the merits; or before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114; or
- ☐ (2) after the period defined in (1) but before the mailing date of a Final Action or Notice of Allowance, and
- ☐ the Statement required under § 1.97(e) below , OR
- ☐ the fee set forth in § 1.17(p), namely \$180.00, is included herein, or
- ☐ (3) after the mailing date of a Final Action or Notice of Allowance but before the payment of the Issue Fee, AND
- ☐ the Statement required under § 1.97(e) below; and

☐ the fee set forth in § 1.17(p), namely \$180.00 is included herein.

It is respectfully requested that each of the references shown on the attached Form PTO-1449 be made of record in this application.

STATEMENT

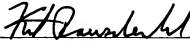
As required under §1.97(e), Applicants, through the undersigned, hereby state either that [check the appropriate space]:

- ☐ 1. That each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing date of the Information Disclosure Statement; or
- ☐ 2. That no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in §1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

FEE AUTHORIZATION

Applicants believe that there is no fee associated with this submission, however should it be determined that a fee is due, the Commissioner is hereby authorized to charge the missing fee to our Deposit Account No. 501211.

Respectfully submitted,



Kurt Rauschenbach
Atty/Agent for Applicant(s)
Rauschenbach Patent Law Group, LLC
Post Office Box 387
Bedford, MA 01730

Date: January 13, 2006
Reg. No. 40,137

Tel. No.: (781) 271-1503
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Doc-1954v1

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	10/553,893
Filing Date	10/21/2005
First Named Inventor	Chistyakov
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	ZON-005USN

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US 3,666,982	05-30-1972	Wiegand, Jr.	
	A2	US 4,953,174	08-28-1990	Eldridge, et al.	
	A3	US 5,015,493	05-14-1991	Gruen	
	A4	US 5,247,531	09-21-1993	Muller-Horsche	
	A5	US 5,795,452	08-18-1998	Kinoshita, et al.	
	A6	US 5,821,548	10-13-1998	Hinchliffe	
	A7	US 5,846,883	12-08-1998	Moslehi	
	A8	US 6,093,293	07-25-2000	Haag, et al.	
	A9	US 6,124,675	09-26-2000	Bertrand, et al.	
	A10	US 6,284,106 B1	09-04-2001	Haag, et al.	
	A11	US 6,296,742 B1	10-02-2001	Kouznetsov	
	A12	US 6,395,641 B2	05-28-2002	Savas	
	A13	US 6,413,382 B1	07-02-2002	Wang, et al.	
	A14	US 6,454,920 B1	09-24-2002	Haag, et al.	
	A15	US 6,488,822 B1	12-03-2002	Moslehi	
	A16	US 2001/0047760 A1	12-06-2002	Moslehi	
	A17	US 6,853,142 B2	02-08-2005	Chistyakov	
	A18	US 6,896,773 B2	05-24-2005	Chistyakov	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code* Number* Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁵
	B1	WO 98/40532	09-17-1998	Chemfilt R & D...		
	B2	WO 01/98553 A1	12-27-2001	Chemfilt R & D...		

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	2	of	4
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Complete if Known

Application Number	10/553,893
Filing Date	10/21/2005
First Named Inventor	Chistyakov
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	ZON-00515N

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

3

of

4

Complete If Known

Application Number	10/553,893
Filing Date	10/21/2005
First Named Inventor	Chistyakov
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	ZON-005USN

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	BOOTH, ET AL., The Transition From Symmetric To Asymmetric Discharges In Pulsed 13.56 MHz Capacitively Coupled Plasmas, J. Appl. Phys., 15 July 1997, Pgs. 552-560, Vol. 82, No. 2, American Institute of Physics.	
	C2	BUNSHAH, ET AL., Deposition Technologies For Films And Coatings, Pgs. 178-183, Noyes Publications, Park Ridge, New Jersey.	
	C3	DAUGHERTY, ET AL., Attachment-Dominated Electron-Beam-Ionized Discharges, Applied Physics Letters, 15 May 1976, Pgs. 581-583, Vol. 28, No. 10, American Institute of Physics.	
	C4	GOTO, ET AL., Dual Excitation Reactive Ion Etcher For Low Energy Plasma Processing, J. Vac. Sci. Technol. A., Sep/Oct 1992, Pgs. 3048-3054, Vol. 10, No. 5, American Vacuum Society.	
	C5	KOUZNETSOV, ET AL., A Novel Pulsed Magnetron Sputter Technique Utilizing Very High Target Power Densities, Surface and Coatings Technology, 1999, Pgs. 290-293, Vol. 122, Elsevier Science S.A.	
	C6	LINDQUIST, ET AL., High Selectivity Plasma Etching Of Silicone Dioxide With A Dual Frequency 27/2 MHz Capacitive RF Discharge.	
	C7	MACAK, Reactive Sputter Deposition Process Of Al2O3 And Characterization Of A Novel High Plasma Density Pulsed Magnetron Discharge, Linkoping Studies In Science And Technology, Pgs. 1-2.	
	C8	MACAK, ET AL., Ionized Sputter Deposition Using An Extremely High Plasma Density Pulsed Magnetron Discharge, J. Vac. Sci. Technol. A., Jul/Aug 2000, Pgs. 1533-1537, Vol. 18, No. 4, American Vacuum Society.	
	C9	MOZGRIN, ET AL., High-Current Low-Pressure Quasi-Stationary Discharge In A Magnetic Field: Experimental Research, Plasma Physics Reports, 1995, Pgs. 400-409, Vol. 21, No. 5.	
	C10	ROSSNAGEL, ET AL., Induced Drift Currents In Circular Planar Magnetrons, J. Vac. Sci. Technol. A., Jan/FEB 1987, Pgs. 88-91, Vol. 5, No. 1, American Vacuum Society.	

Examiner Signature	Date Considered
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 † Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

4

of

4

Attorney Docket Number

Complete If Known

Application Number

10/553 893

Filing Date

10/21/2005

First Named Inventor

Chistvakov

Art Unit

Not Yet Assigned

Examiner Name

Not Yet Assigned

Attorney Docket Number

ZON-005USN

NON PATENT LITERATURE DOCUMENTS

[illegible]

Examiner Signature	/Haissa Philogene/	Date Considered	07/13/2008
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